

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing Of Claims:

1-8. (Canceled).

9. (New) A fuel injector, comprising:

an actuator, the actuator being one of a piezoelectric actuator and a magnetostrictive actuator;

an hydraulic coupler including a master piston and a slave piston; and

a valve needle and a valve-closure member provided on the valve needle, the valve-closure member cooperating with a valve-seat surface to form a valve-sealing seat;

wherein the actuator actuates via the hydraulic coupler the valve-closure member provided on the valve needle, and wherein a coupler gap formed between the master piston and the slave piston is adapted to close in a cold state of the fuel injector and adapted to open via a temperature-related linear deformation of the actuator as a temperature of the fuel injector increases.

10. (New) The fuel injector of claim 9, wherein a gap width of the coupler gap is between about 25 μm and 50 μm at a temperature of about 20 degrees Celsius and a fuel pressure of about 0.5 MPa.

11. (New) The fuel injector of claim 9, wherein the hydraulic coupler penetrates a sleeve, the sleeve abutting against a spring via a flange connected to the sleeve.

12. (New) The fuel injector of claim 11, wherein the spring is braced against a disk connected to the slave piston by force locking.

13. (New) The fuel injector of claim 11, wherein the sleeve has a shoulder, and wherein the slave piston projects axially beyond the shoulder by a predetermined length h_k .

14. (New) The fuel injector of claim 13, wherein an overall lift of the actuator corresponds to the predetermined length h_k in the cold state of the fuel injector.
15. (New) The fuel injector of claim 13, wherein an overall lift of the actuator is substantially equal to the sum of an axial width of the coupler gap formed between the master piston and the slave piston, and the predetermined length h_k , in a warm state of the fuel injector.
16. (New) The fuel injector of claim 13, wherein the predetermined length h_k is between about 40 μm and about 70 μm .
17. (New) The fuel injector of claim 15, wherein the predetermined length h_k is between about 40 μm and about 70 μm .